

# SOUND WAVES

*Working in partnership to protect Puget Sound*

Office of the Governor | State of Washington

Spring 2006 | Vol. 21, No. 1

## Climate report raises concern for the region

Last fall, the Puget Sound Action Team commissioned the first detailed assessment of how climate change has affected—and will continue to affect—the Puget Sound environment.

The report, *"Uncertain Future: Climate Change and its Effects on Puget Sound,"* was prepared by the University of Washington's Climate Impacts Group. The report urges policy-makers, planners and resource managers to consider the implications of climate change in future decision-making.

The report, which can be downloaded at [www.psat.wa.gov/climatechange](http://www.psat.wa.gov/climatechange), helped shape local discussions on climate change. Check with your local government to see how they're getting involved.

Climate change is the focus of this year's Pacific Northwest Weather Workshop, March 3-4 in Seattle. For more information, call 206-526-6095 x 224/222 or visit [www.atmos.washington.edu/maciver/pnw.2006/](http://www.atmos.washington.edu/maciver/pnw.2006/).

## A new year, a new look

As the state's focus on Puget Sound ramps up in 2006, so does ours.

We want the Puget Sound Action Team to be the first place you turn for news about Puget Sound, starting with a retooled *Sound Waves*.

In the newsletter, you'll find articles on scientific advancements, restoration projects, improved government regulations, citizen efforts to protect the Sound and more.

All with a snappy look and feel.

Sharing our 20 years of experience looking at the Sound as an ecosystem is our top priority. What works? What doesn't? How can you help? How can we help you?

We hope you enjoy the new *Sound Waves*.



Puget Sound at sunset. / Shutterstock

# Governor launches new initiative for Puget Sound

Saying that we must "do more" and "do better" to protect and restore Puget Sound, Gov. Chris Gregoire unveiled an initiative on Dec. 19, 2005, to revitalize efforts to protect one of the state's crown jewels.

Recognizing that achieving the goal of a healthy Puget Sound will only happen by dramatically increasing efforts, Gregoire outlined three key elements of the Puget Sound Initiative:

- Launch the **Puget Sound Partnership** to engage leaders and the public to draw a new road map to a sustainable Puget Sound by 2020.
- Accelerate cleanups, restoration and adoption of new technologies through a

**\$42 million supplemental budget** proposal for 2006.

- Reduce harm from septic systems, and improve the handling of marine oil and fuel transfers through **two new proposed laws** in 2006.

"This initiative zooms in on the most challenging problems in Puget Sound," said **Brad Ack**, Chair of the Puget Sound Action Team. "The new funds and policy bills will accelerate high-priority actions on the ground, while the public-private partnership will build the broader coalition needed to safeguard the future of this spectacular natural area."

*See Initiative on pg.10*

# EELGRASS STUDY BRINGS GOOD NEWS AND BAD

First, the good news: in Puget Sound, many eelgrass populations are holding steady.

Now, the bad news: researchers found sharp declines in five shallow bays in the San Juan Islands and in 14 localized sites in greater Puget Sound. The entire Hood Canal has also had steady declines in eelgrass areas.

The findings are from a study published late last year by the Washington Department of Natural Resources (DNR). As part of

an ongoing program to monitor the condition of eelgrass, DNR will track its status yearly, and complete another study by the end of 2007.

Eelgrass provides important habitat for forage fish, juvenile salmon and several species of marine birds. Since 2000, scientists with DNR Nearshore Habitat Program have been studying the abundance of eelgrass in Puget Sound.

Though the overall picture looks good,

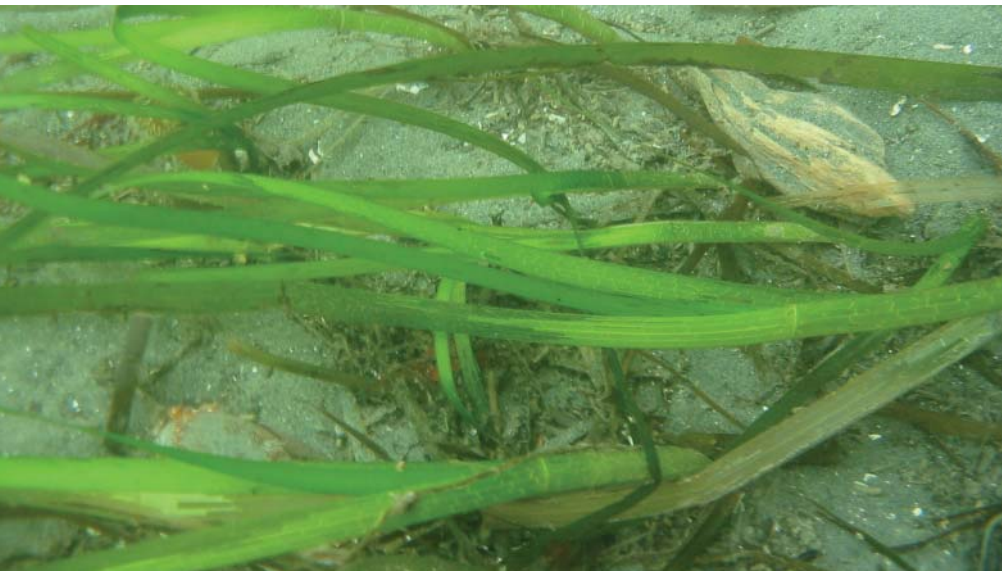
scientists will be closely monitoring areas of decline.

“We are focusing attention on these localized areas in case they signal the first symptoms of a growing problem,” said Pete Dowty, Ph.D., ecologist with DNR and main author of the report. “We still don’t know what’s causing the declines.”

This year, DNR staff will launch a new initiative aimed at gaining a better understanding of eelgrass declines.

DNR’s Nearshore Habitat Program conducts eelgrass monitoring as one part of the Puget Sound Assessment and Monitoring Program (PSAMP), which the Action Team coordinates.

To download the report, *Puget Sound Submerged Vegetation Monitoring Project: 2003–2004 Monitoring Report*, go to [www.psat.wa.gov/eelgrass](http://www.psat.wa.gov/eelgrass).



A DNR report shows eelgrass populations holding steady overall, but there are areas of concern.  
/ John Southard, Battelle Marine Sciences Laboratory

These eelgrass studies are part of the 2005–2007 Puget Sound Conservation and Recovery Plan, which the Action Team develops to guide state agencies, other governments and entities in their work to protect and restore the Sound. First-year results from the plan will be published this summer. Visit [www.psat.wa.gov/plan](http://www.psat.wa.gov/plan)

## King County foils CSOs with one Heck of a Pipe!

Congratulations to King County for completing a major project that will keep untreated sewage and stormwater from overflowing into Lake Washington.

Completed last October, the \$77 million “Henderson/Martin Luther King Combined Sewer Overflow (CSO) Project” can now carry more than 20 million gallons of stormwater and wastewater a day away from the lake during and after heavy rainfalls.

The 50-year-old system was in dire need of an overhaul. Each year, rainy weather contributed 30 to 60 million gallons of combined

waste and stormwater that overflowed into Lake Washington.

### Now, that’s a pipe!

A huge 15-foot diameter tunnel can now hold millions of gallons of dirty water until it can be treated. Other improvements will add to the overall effectiveness of this state-of-the-art system that took three years to complete.

For more information, visit [www.dnr.metrokc.gov/wtd/henderson-cso/index-1.htm](http://www.dnr.metrokc.gov/wtd/henderson-cso/index-1.htm).



## STAY CURRENT WITH Hood Canal News

Want to know what's going on with Hood Canal's health? Subscribe to Hood Canal News, a new quarterly electronic newsletter debuting in late February. For more information, visit [www.psat.wa.gov/hoodcanal](http://www.psat.wa.gov/hoodcanal).

# New sewage systems mean Less Nitrogen for canal

Not only did the septic drain field at John and Carrin Sheridan's home on Highway 106 back up and overflow right in their own front yard, but their neighbor's sewage drained there too. Down the road, under orders from the Mason

County Health Department, a duplex sat unoccupied because its septic system had also failed.

Now those three properties are connected through a small community "cluster" system, which treats

sewage at each of the three sites and then directs the clear effluent from each home to a new, shared drip-irrigation drain field on the Sheridan's property. The innovative drain field, located as far from the shoreline as possible, uses native plants to absorb nitrogen before it can reach the canal.

"A lot of people have a stake in the success of this new system," John Sheridan said. "I'm pretty comfortable with what this can do for the canal. And it's so simple, it's not even funny."

### New hope for tired septic systems

In 2004, the Action Team directed nearly \$800,000 in state and federal funding for 14 pilot projects such as the one on the Sheridan's property to correct the low levels of dissolved oxygen in Hood Canal. Many factors contribute to the canal's "dead zone," including excess nitrogen leaching from septic systems.

Several of these projects will improve the way onsite sewage systems deal with nitrogen produced by traditional septic systems. Contractors have finished construction on a new system and also on retrofits for existing systems along Hood

*"A lot of people have a stake in the success of this new system"* John Sheridan, property owner

Canal's south shore that demonstrate how new technologies can remove excess nitrogen, thus reducing their contribution to the canal's low dissolved oxygen problem.

### Retrofit goes aerobic

Older septic systems from three waterfront homes west of Twanoh will now do a better job of keeping nitrogen out of Hood Canal. A relatively simple upgrade creates a complex aerobic-anaerobic process, with the ultimate goal of reducing the amount of nitrogen in the effluent that leaves the treatment tank. The aerated waste, now clearer and containing less nitrogen, is disinfected using ultraviolet light as it flows to the homes' drain fields.

Find more examples of progress to correct low dissolved oxygen in Hood Canal at [www.psat.wa.gov/hoodcanal](http://www.psat.wa.gov/hoodcanal).



TOP OF PAGE: Westward view of Hood Canal from Union. ABOVE: Craig Schrader (left) and Linda Atkins, Jefferson County Health and Human Services Department, collect samples from a septic system demonstration project site to test its ability to remove nitrogen. (November 2005) / Terry Hull, Action Team

# LID is law in Langley

Last fall, the City of Langley became the first local government in the region to adopt the Action Team's *Low Impact Development Technical Guidance Manual for Puget Sound* as part of its development code.

Builders and developers now must integrate low impact development (LID) into their site designs. Conventional stormwater management measures can only be used if LID measures are not practical.

The city incorporated the LID manual by reference, rather than making item-by-item changes to the code. "This approach gives developers maximum flexibility in selecting LID applications for their particular site conditions," said Alice Schisel, Langley's planning official. "It also was a great time savings for our small staff and for the planning advisory board."

The Action Team developed the LID manual along with Washington State University Extension, Pierce County, in 2005 so developers, local government staff and others would have a common understanding of LID, and use the approach in developing projects.

"We applaud Langley for adopting the LID manual," said **Bruce Wulkan**, the Action Team's Stormwater Program Manager. "It's a win-win situation. The development community will have more options for managing stormwater, the city will grow more beautifully, and Puget Sound will be better protected from stormwater runoff."

To download the manual, visit [www.psat.wa.gov/LID\\_manual](http://www.psat.wa.gov/LID_manual). For more information on the City of Langley, contact Alice Schisel, 360-221-4245 or [landuse@langleywa.org](mailto:landuse@langleywa.org).

For more information on the Action Team's programs on stormwater and LID, contact Bruce Wulkan, Stormwater Program Manager, 360-725-5455 or [bwulkan@psat.wa.gov](mailto:bwulkan@psat.wa.gov).

# L.I.D.

## Meadow on the Hylebos wins praise... and it's not even built yet

**H**omes on the Meadow on the Hylebos in Pierce County aren't even built yet, but professional associations and an environmental organization have already honored the development for using low impact development (LID) practices.

In September 2005, a group dedicated to conserving the Hylebos stream presented an "Innovation in Conservation Award" to David Mahlman, owner and developer; to AHBL, the engineering firm that did the site design and engineering; and to Pierce County, which helped move the project through the permitting process.

"We are firm believers in the promise of low impact development," said Chris Carrel,

Executive Director of Friends of the Hylebos. "It was very important to recognize the first major development in the Hylebos Watershed to use LID, and we hope that other developments will follow their example."

### A suite of LID techniques

Meadow on the Hylebos uses a full suite of LID techniques. Early on, project planners decided to preserve 50 percent of the 9.5-acre site's vegetation. When completed, the development's built footprint will cover only 4.5 acres. These numbers are especially impressive because the project is located in an urban growth area, where the county will direct development.

In lieu of a full-sized conventional stormwater detention facility to handle runoff, the development will rely primarily

on bioretention—or rain gardens—to do the job. The site will still have a smaller detention area, but just 25 percent of what a conventional facility would have been.

Other LID practices include narrower roadways (24-ft wide instead of 28-ft) to reduce impervious pavement, amending soils with compost that were disturbed during construction, and using native and ornamental plantings instead of lawns. In addition, Mahlman voluntarily provided for a 150-foot buffer between the development and the Hylebos.

*"We are firm believers in the promise of low impact development"* Chris Carrel, Friends of the Hylebos

### Yet another award

Last summer, the American Planning Association's Washington State chapter and the Planning Association of Washington bestowed a joint award to the Meadow on the Hylebos project for sustainability planning.

### In a class of its own

The Meadow on the Hylebos is one of the few LID developments in the nation that includes monitoring as a feature. The Action Team provided \$20,000 to WSU Extension Pierce County to conduct pre-construction monitoring to develop baseline information. Monitoring will continue for a minimum of three years after completion, but project developers hope to find additional funding for a full, five-year commitment to help demonstrate the success of LID practices.





**KEEP ON THE GRASS** Cars now park on the grass at the Future of Flight facility near the Boeing plant in Everett. This GrassPave parking lot is a pervious pavement system that helps prevent runoff from stormwater.  
/ Bill Lewallen, Snohomish County

## WSDOT STORMWATER PERMIT Comments due Feb. 21

Public comments on Washington State Department of Transportation's (WSDOT) preliminary draft Statewide Stormwater Permit are due Feb. 21. For more information, visit [www.ecy.wa.gov/programs/wq/stormwater/municipal/wsdot.html](http://www.ecy.wa.gov/programs/wq/stormwater/municipal/wsdot.html).

## PUBLIC ENCOURAGED TO COMMENT Draft NPDES permits

Public comments on the draft National Pollutant Discharge Elimination System (NPDES) stormwater permits for Phase I and Phase II cities and counties are due May 19. The permits outline specific requirements for cities and counties to manage stormwater. The Phase I permit covers the cities of Seattle and Tacoma, and Snohomish, King and Pierce counties. The Phase II permit covers about 80 other smaller cities and counties in Puget Sound. Visit [www.ecy.wa.gov/programs/wq/stormwater/index.html](http://www.ecy.wa.gov/programs/wq/stormwater/index.html).

## LOW IMPACT DEVELOPMENT

# Action Team helps local governments write LID into their regulations

Many local building codes don't allow for certain low impact development (LID) practices that help decrease stormwater runoff, such as narrower roads and bioretention swales. Often, if a developer wants to use these proven alternative approaches to stormwater management, he or she must go through a time-consuming and costly process of applying for exceptions.

Last year, the Action Team made it possible for busy, budget-strapped local governments to make room for LID in their regulations.

### Free help for busy staff

Through a competitive process, the Action Team selected 11 local governments eager to get free help making their regulations more LID-friendly. The Action Team also chose the Tacoma engineering firm AHBL, Inc., through a competitive process to provide that technical assistance. AHBL suggested recommendations to city and county staff for regulations dealing with stormwater management,

subdivisions, planned unit developments, parking, roads, commercial and industrial development, and incentives to developers.

### Breaking new ground

"I think this is one of the biggest types of projects in the nation," said **Bruce Wulkan**, the Action Team's Stormwater Program Manager. "No one else that I know of has attempted to work with 11 local governments simultaneously to revise regulatory language so local managers and elected officials can consider adopting LID."

The \$121,000 in funding for this technical assistance project came from Washington Department of Ecology's Direct Implementation Fund and from U.S. Environmental Protection Agency and State Water Quality Account funds administered by the Action Team.

The cities involved in the 2005 Low Impact Development Local Regulation Assistance Project are Bellingham, Issaquah, Marysville, Poulsbo and Redmond. Counties are Clallam, Jefferson, Kitsap, Snohomish, Thurston and Whatcom. Materials developed from these projects will be available this spring at [www.psat.wa.gov/LID](http://www.psat.wa.gov/LID). This spring the Action Team will select another engineering firm and

*"No one else that I know of has attempted to work with 11 local governments simultaneously"*

Bruce Wulkan, Action Team

six local governments to participate in a second round of technical assistance.



## EXTREME MAKEOVER: RESTORATION EDITION

# One bulkhead removal project could answer questions Soundwide

A stretch of shoreline in south Puget Sound is getting an extreme makeover thanks to a restoration project that removed 250 feet of bulkhead, an abandoned house with a failing septic system and a variety of invasive shrubs and weeds.

Washington Department of Natural Resources (DNR) owns the property, located on Weyer Point north of Olympia in Woodard Bay, and wants to return it to nature.

Bulkheads and other forms of shoreline armoring can harm shorelines by preventing bluff and bank erosion—a natural process that provides sediments to maintain shoreline habitats. Also, bulkheads alter wave energy, which creates a scouring action on the beach in front of the bulkhead and damages habitat.

*“To my knowledge, simply removing the bulkheads and watching what happens has never been done”* Michele Zukerberg, DNR

### Watch what happens

Last fall, crews removed rock, log and concrete bulkheads—all under the watchful eye of archeologists, geologists and Michele Zukerberg, manager of DNR's Woodard Bay restoration project.

While bulkheads have been removed in several locations around Puget Sound, they're usually replaced with soft-shore armoring, or they require long-term maintenance through manual replenishment of beach sediments.

Nothing will replace the Weyer Point bulkheads.



An excavator removes a rock and concrete bulkhead at the Woodard Bay Restoration Project near Olympia.  
/ Michele Zukerberg, DNR

“To my knowledge, simply removing the bulkheads and watching what happens has never been done,” Zukerberg said. “So there is very little information about what might happen when you take bulkheads away.”

### How can you tell if it's working?

Before the excavator rumbled to life, Zukerberg and her colleagues sampled sediments and surveyed the local sea life to gather baseline data. Results from this project could have a wide impact on shoreline armoring issues throughout Puget Sound.

“As the Sound's landlord, it is essential for the Department of Natural Resources to set the standard for stewardship of our marine resources,” said **Brad Ack**, Chair of the Action Team, “This project will do just that.”

Removing the bulkheads was only one part of this impressive project. DNR staff and partners looked for ways to recycle or reuse most of the materials from the site. Zukerberg calculated that, by weight, only 13 percent of several hundred tons of material went into a landfill.

The project was funded by a grant from the Washington Interagency Committee for

*“As the Sound's landlord, it is essential for the Department of Natural Resources to set the standard for stewardship of our marine resources”* Brad Ack, Action Team

Outdoor Recreation and the FishAmerica / NOAA partnership.

For more information, visit [www.dnr.wa.gov/nap/woodard\\_weyer/](http://www.dnr.wa.gov/nap/woodard_weyer/).

# SOGGY WINTER, HIGH TIDES

# NO MATCH

## FOR NEW STORMWATER SYSTEM

This winter's near-record rainfall put the Dash Point Pump Station to the test, but nature's deluge was no match for the new stormwater system installed in late 2004 by Pierce County.

That's good news for residents of Beach Drive N.E. In the past half-dozen years, heavy rains and winter high tides regularly flooded their homes, garages and streets. The old stormwater system was undersized, and beach sand had crept over the end of the outfall pipe, preventing it from adequately discharging stormwater into Puget Sound, especially during heavy rains.

In the process of fixing the flooding problem, engineers at Pierce County Water Programs uncovered other obstacles.

First, county staff discovered that fecal coliform was seeping into the stormwater drainage system. Definitely not good. The local health department confirmed the bacteria was coming from at least one septic system in the neighborhood of 12 homes and one restaurant. To prevent seepage into the existing pipe, the county installed a new one.

Work resumed. Then biologists from Washington Department of Fish and Wildlife (WDFW) informed county engineers that they wouldn't be able to extend the existing outfall pipe beyond the troublesome sandy area because that section of beach was important habitat for surf smelt, young salmon and eelgrass beds.

Working with WDFW, county engineers found an alternative location for the outfall, away from the more sensitive habitat. But this required re-routing the drainpipes through more of the neighborhood, which meant getting easements for many of the privately owned tidelands.

"This project shows the importance of considering water quality and habitat issues when figuring out solutions for flooding problems," said **Kathy Taylor**, Ph.D., the Action Team's Regional Liaison to Pierce County.

The new system includes two 8-inch submersible pumps that automatically switch on as needed to control flows. Since completion, the pumps have put in 41 hours of work, Schmidt said. The \$600,000 project took 3-1/2 months to complete.



Workers lower the second piece of a 120-inch wet well for the new Dash Point Pump Station in Pierce County. / Helmut Schmidt, Pierce County Water Programs

Contact: Al Zehni, Pierce County Water Programs, 253-798-4677 or [azehni@co.pierce.wa.us](mailto:azehni@co.pierce.wa.us).

## Banding together to bring shellfish back from the brink

Growth in southern Puget Sound has taken a toll on once-productive commercial shellfish growing areas in Henderson Inlet near Olympia.

Since the mid 1980s, the state Department of Health has increasingly limited or completely closed the number of acres available for harvest in the inlet due to high levels of bacteria from many nonpoint pollution sources, including failing onsite septic systems.

An advisory group of citizens, state and local health officials, shellfish farmers and other interests spent several years addressing proper operation and maintenance of septic systems. On Nov. 21, 2005, Thurston County commissioners approved

the group's recommendations. The commissioners created a special Henderson Watershed Protection Area, which now requires more intensive monitoring of septic systems. Homeowners in the area will also need renewable operating certificates. The program divides septic systems into risk categories, based on soil types, location and proximity to surface waters, all of which will determine the frequency of required periodic inspections.

"It will be exciting to see how this approach to assessing septic systems translates to cleaner water for shellfish," said **Terry Hull**, the Action Team's Program Manager for Nutrients and Pathogens. "It's innovative to base a program on

risk levels. You can bet the Action Team will be following the county's program closely. It could be a model for others."

To help fund the new program, county commissioners will assess fees based on the types of systems homeowners have. The rates for 2007 will be \$32 for low-risk systems, \$87 for high-risk systems and \$160 for community systems.

Contact: Sue Davis, Thurston County, 360-754-4111 or [daviss@co.thurston.co.us](mailto:daviss@co.thurston.co.us).



## Volunteer divers tackle tough tunicates

On a cold, rainy and thoroughly miserable day in early November 2005, two-dozen volunteer divers spent hours removing clumps of the highly invasive “club tunicate” from the docks at Pleasant Harbor Marina on northern Hood Canal.

While club tunicates (*Styela clava*) pose little threat to docks or boats beyond being a nuisance, they can potentially move into and take over shellfish areas and marine habitats.

After removing nearly half a ton of the troublesome tunicates, divers discovered the tunicate invasion was far more extensive than a day’s dive could tackle. They ended the day by marking boats and other areas where tunicates were taking hold.

Additional research prompted the Action Team staff to coordinate an emergency funding request in January, which will enable the Washington Department of Fish and Wildlife to take immediate steps to eradicate known populations of tunicates. So far, three marinas have been infested: Pleasant Harbor, Neah Bay and Blaine.

Seeing the urgency of the situation, Gov. Chris Gregoire made \$75,000 available from her emergency fund and added \$175,000 at the last minute to her proposed \$42 million supplemental budget for Puget Sound. The funding will go to identifying and mapping new locations of club tunicates.

In 2005, Washington Sea Grant sponsored a series of educational workshops for divers around Puget Sound to learn how to identify and safely remove club tunicates from floats and pilings.

**Alex Goo, 12, of Federal Way, holds a fistful of invasive club tunicates he helped remove from under the docks and floats at Pleasant Harbor Marina on a cold November day.**  
/ Toni Droscher, Action Team



## Science group looks inward, charts new direction



**Scientists from WDFW (part of PSAMP) conduct surveys of English sole in Elliott Bay aboard a trawler (June 28, 2004)**  
/ Sarah Brace, Action Team

Since 1989, scientists with the Puget Sound Ambient Monitoring Program (PSAMP) have been monitoring the health of Puget Sound. PSAMP studies provide the science that drives many Soundwide decisions about resource management. Long-term monitoring activities by PSAMP researchers include studies of marine birds, water quality, eelgrass and contaminants in sediment and fish.

The Action Team coordinates PSAMP. According to a self-assessment conducted by the PSAMP Management Committee in late 2005, the program is doing a good job in its main mission of delivering data and analysis, for example in understanding the effects of contaminants in sediments and the marine food web.

But the review found that PSAMP needs to step up efforts to integrate science and research with policy decisions and management. It also needs to do a better job connecting to the greater science effort in

Puget Sound. Members also decided the name of the organization needed to reflect the increased focus on assessing the success of specific management strategies. The new name is Puget Sound “Assessment” and Monitoring Program.

In 2006, PSAMP members will look at how they can fill the gaps in science to provide more support to management decisions, and they will play a role in better coordinating science efforts surrounding Puget Sound. The group also will search for ways to get dedicated funding for studies that will address emerging issues.

PSAMP is made up of 28 scientists, researchers and managers from nine state and federal agencies. For more information, or to download a copy of the self-assessment report, visit: [www.psat.wa.gov/psamp](http://www.psat.wa.gov/psamp).

Contact: **Sarah Brace**, Science Liaison, 360-725-5464, or [sbrace@psat.wa.gov](mailto:sbrace@psat.wa.gov).



# Research gathering energizes focus on marine birds

In the Pacific Northwest, salmon get a lot of press. Salmon are an indicator species, and their numbers reveal much about the health of the region's ecosystem.

But marine birds are also an indicator of this ecosystem's health. Since 1970, the total number of marine birds in the region has dropped by an astounding 47 percent. Unfortunately, seaducks and seabirds don't share the same kind of glory that salmon do.

*“Before the meeting, there was really no convergence of thought on how best to approach the marine bird issue”*

Hilary Culverwell, Action Team

“We’ve known about marine bird declines for some time,” said Dave Nysewander, a biologist with the Washington Department of Fish and Wildlife. “But the news has often been eclipsed by the emphasis on salmon due to the more overt commercial and economic factors associated with them.”

Scientists who study marine birds are hoping to change all that.

Last September, 34 scientists and resource managers from state and federal agencies, universities and non-profit organizations around the Pacific Northwest met to identify gaps in the science, research and management of marine birds and to determine next steps.

## Convergence, collaboration and commitment

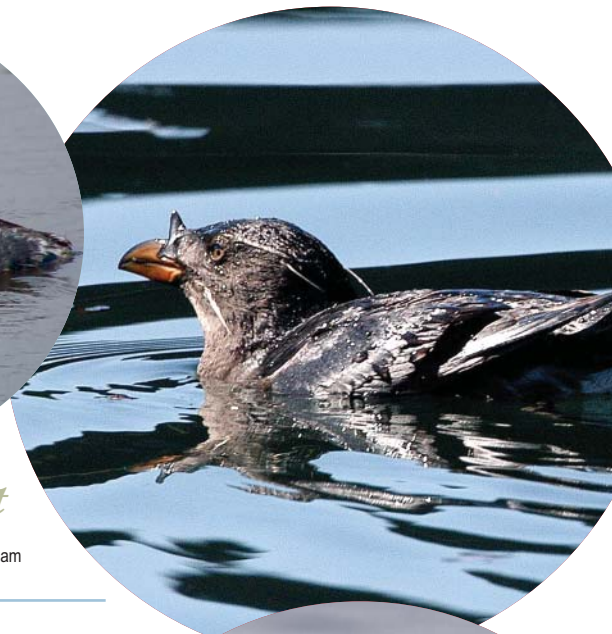
What’s causing marine bird populations to decline? Participants agreed more research is needed to fully understand the influences of people, diet and fisheries on marine bird populations. The group also recognized the need to find an organization willing to spearhead a campaign to educate the public and lawmakers on the marine birds’ plight.

By the end of the daylong meeting, participants had voted on three bird species for priority research attention: Western grebes, rhinoceros auklets and surf scoters.

“Before the meeting, there was really no convergence of thought on how best to approach the marine bird issue,” said **Hilary Culverwell**, the Action Team’s Regional Liaison for San Juan, Skagit and Whatcom counties, and one of the organizers of the conference. “Now, there’s a new focus and energy to work together to reverse marine bird declines.”

Culverwell expects to complete a report on research gaps by fall 2006. This information will help develop an appropriate role for the Action Team in the broader effort. To learn more, download a summary of the September meeting: [www.psat.wa.gov/bird\\_report](http://www.psat.wa.gov/bird_report).

The SeaDoc Society sponsored the 2005 Puget Sound Seabird and Seaduck Research Meeting, with help from Action Team staff.



Marine bird experts gathered at a workshop last September and voted on three bird species they believed needed priority attention and research: Western grebe (upper left) / Rick Cameron, rhinoceros auklet (center) and surf scoters / Mike Yip.

## Hood Canal farms earn 'Salmon-safe' seal of approval



Barbara Greene, owner of Delandé Dan Farm in Belfair, was one of three Hood Canal farms in 2005 to earn the "Salmon-safe" label. She poses here with her small herd of Scottish Galloway cattle. / Toni Droscher, Action Team

Barbara Greene can now add the Salmon-safe label to her organically raised eggs and vegetables.

Greene, owner of Delandé Dan Farm in Belfair, was one of three farms in the Hood Canal Watershed to be certified "Salmon-safe" in late 2005 for using fish-friendly farming practices. Stewardship Partners, a non-profit organization, established the Salmon-safe program to recognize farmers who protect habitat, water quality and overall watershed health while managing their agriculture property. There are nearly two-dozen Salmon-safe farms throughout Puget Sound. How farms manage and use water is one of several criteria scrutinized on the way to becoming Salmon-safe. Greene's five-acre farm sits on a hill above Hood Canal's south shore. The property slopes down and Greene knows what runs off her property may run into the canal. "The name of the game is to keep water on your property as much as possible," Greene said.

Some of her water strategies are downright simple. At the lower end of her property she lets shrubs—even blackberries—grow alongside the road so that their root systems will absorb a lot of the runoff. She also prevents erosion by covering the bare ground where her cattle feed with straw or mulch. To cut water use, Greene uses drip irrigation instead of overhead sprinklers, and she keeps her orchard and garden irrigation systems well mulched to prevent evaporation.

The two other Hood Canal farms that were certified Salmon-safe in 2005 are Nicholas Browne and Jonathan Pavley, High Water Agriculture, a 10-acre farm in the Skokomish Valley, and Katrinka Hibler, Giggling Goats Gardens, a 40-acre farm in Shelton.

Learn more about the Salmon-Safe label at [www.stewardshippartners.org](http://www.stewardshippartners.org).

### Initiative continued from page 1

#### Puget Sound Partnership

The Governor enlisted some of the region's leading citizens to form the nucleus of a long-term public/private entity—the Puget Sound Partnership. The Partnership will lay the foundation for a 15-year effort to solve the Sound's most vexing problems.

#### The Partnership will:

##### CREATE A 2020 ACTION AGENDA

Recommend a set of actions that will begin to recover the Sound by 2020.

##### INCREASE PUBLIC INVOLVEMENT

Engage citizens, governments, the business and conservation communities and others in ramping up efforts to recover the Sound.

##### IMPROVE STRUCTURE

Recommend the best organizational structures and approaches to steward the Sound back to health and protect it over time.

##### EXPAND FUNDING

Review funding sources for the protection and restoration of the Sound and prioritize spending to achieve the 2020 outcomes.

##### USE SCIENCE MORE EFFECTIVELY

Recommend how scientific knowledge should be organized and applied in order to inform policies and assist in setting and meeting goals.

The Partnership must present initial recommendations by June 15, 2006, and final recommendations in October 2006.

#### 2006 budget proposal and legislation

There are nearly 15 line items in the original supplemental budget proposal. Highlights:

- Increase the rate of cleanups of contaminated sites on or near the Sound.
- Store oil spill equipment closer to where oil spills may occur at 40 sites around the Sound.
- Provide low- and no-interest loans to homeowners to fix failing septic systems.
- Improve wastewater treatment systems at six state parks.
- Accelerate adoption of low impact development techniques.

The two new laws focus on reducing harm from septic systems, and improving the handling of marine oil and fuel transfers, respectively.

#### What happens next?

Exact outcomes will be clearer after the 2006 Legislature acts on the Governor's proposals, and as the Partnership makes its recommendations later this year. "What we know for certain is that our collective energy

is very high to do something significant," said Ack. "We can be sure the focus will never stray from getting to a clean and healthy Puget Sound. We want marine life that thrives, fish and shellfish that we can safely eat, and beaches where the strong-willed can swim."

For more information, [www.psat.wa.gov](http://www.psat.wa.gov).

## THE PUGET SOUND PARTNERSHIP

Serving with Gov. Gregoire\* as initial partners are:

**Norm Dicks**, U.S. Representative

**Mark Emmert**, Ph.D., President, University of Washington

**Kathy Fletcher**, Executive Director, People for Puget Sound

**Billy Frank, Jr.**,\* Chairman, Northwest Indian Fisheries Commission

**Colin Moseley**, President, Green Diamond Resource Company and Chairman, Simpson Investment Company

**William Ruckelshaus\***, Chair, Salmon Recovery Funding Board

**Mike Shelby**, Executive Director, Western Washington Agricultural Association

**Ron Sims**, King County Executive

**Bill Taylor**, Vice President, Taylor Shellfish Farms

\*Chairs



## SOUND WAVES

The Puget Sound Action Team publishes Sound Waves quarterly.

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### PUGET SOUND ACTION TEAM PARTNERSHIP

Representatives from the following groups serve on the Action Team:

**Washington State**  
Community, Trade and  
Economic Development  
Conservation Commission  
Department of Agriculture  
Department of Ecology  
Department of Fish and  
Wildlife  
Department of Health  
Department of Natural  
Resources  
Department of  
Transportation  
Interagency Committee for  
Outdoor Recreation  
Parks and Recreation  
Commission

**Local Government**  
City of Burien, representing  
Puget Sound cities  
Whatcom County,  
representing  
Puget Sound counties

**Federal Government**  
(non-voting)  
NOAA Fisheries  
U.S. Environmental  
Protection Agency  
U.S. Fish & Wildlife Service

**Chair: Director of Puget  
Sound Action Team staff**

**Tribal Government**  
Tulalip Tribes, representing  
Puget Sound Tribes

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### For more information

[www.psat.wa.gov](http://www.psat.wa.gov)

If you would like copies of this document in an alternative format, please call 800-54-SOUND or for TDD, call 800-833-6388.

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## Action Team co-hosts toxics forum April 5 in Seattle

The Puget Sound Action is teaming up with People for Puget Sound and others to sponsor a one-day forum to better understand how toxic contamination affects the Puget Sound marine environment, human health and the economy. The forum is from 9 a.m. to 8:30 p.m., April 5 at Seattle's Town Hall. For more information, call People for Puget Sound, 206-382-7007 or visit [www.pugetsound.org](http://www.pugetsound.org).

## Teachers are 'Storming the Sound' for the environment

The Puget Sound Action Team, People for Puget Sound and a host of other sponsors invite educators to participate in one of two environmental education and networking workshops this winter and spring.

- Storming the Sound—Central, Feb. 23, in West Seattle.
- The Storming the Sound—South, April 5 in Matlock (near Shelton).

Contact People for Puget Sound for more information, 206-382-7007, or [www.pugetsound.org](http://www.pugetsound.org).

## 76 projects hungry for PIE

In late February, the Puget Sound Action Team will award approximately \$400,000 in funds through its Public Involvement and Education (PIE) program. Seventy-six proposals totaling requests for \$2.3 million were sent in by agencies, organizations and schools. Eight to 12 proposals will be awarded. Projects will receive up to \$45,000 to educate and involve the public and advance the priorities of the Action Team's 2005-2007 *Conservation and Recovery Plan*. To learn who will get a piece of the PIE later this month, check [www.psat.wa.gov](http://www.psat.wa.gov).

## QUESTIONS?

The Action Team's Regional Liaisons work at the local level for the conservation and recovery of the Puget Sound.

**John Cambalik** 360-582-9132  
Clallam, Jefferson & Kitsap counties

**Hilary Culverwell** 360-676-2233  
San Juan, Skagit & Whatcom counties

**Linda Lyshall** 425-640-3557  
Snohomish & Island counties

**Stuart Glasoe** 360-407-7319  
Thurston & Mason counties

**Kathy Taylor** 253-333-4920  
Pierce & King counties

### NEWS TO KNOW

## Comment on salmon recovery plan by Feb. 27

Regional efforts to save salmon turned another corner in late December 2005 when the National Marine Fisheries Service (NMFS) announced the public review period for the Draft Puget Sound Salmon Recovery Plan, developed in part by the Puget Sound Action Team. The deadline to comment on the plan is Feb. 27. The Action Team salutes the Shared Strategy process that brought about this plan. To learn how you can comment, visit: [www.nwr.noaa.gov/Salmon-Recovery-Planning/ESA-Recovery-Plans/Draft-Plans.cfm](http://www.nwr.noaa.gov/Salmon-Recovery-Planning/ESA-Recovery-Plans/Draft-Plans.cfm).

### RESEARCH CONFERENCE 2007

## Save the Date!

Mark your calendars for the 8th Puget Sound

Georgia Basin Research Conference set for March 26-29 at the Westin Bayshore in Vancouver, B.C. Details will become available later this year. Watch [www.psat.wa.gov](http://www.psat.wa.gov) for updates.

## Skagit County Commissioner appointed to Puget Sound Council



Gov. Chris Gregoire appointed Skagit County Commissioner Ken Dahlstedt to the Puget Sound Council in October 2005 to represent county government. A Mount Vernon resident, Dahlstedt is a fourth-generation agri-businessman and farms 400 acres in the Skagit Valley. He has served as a Skagit County Commissioner since 2000. Dahlstedt will serve until July 1, 2007, filling

out the remainder of former council member Rhea Miller's term. The 11-member Puget Sound Council provides guidance to the Puget Sound Action Team Partnership, which defines, coordinates and carries out Washington State's environmental agenda for Puget Sound. For more information, visit [www.psat.wa.gov/council](http://www.psat.wa.gov/council).

## Attention oyster growers! New booklet out on Olympias

Washington's only native oysters—the Olympias—came close to extinction in the 1990s, but people throughout Puget Sound are working hard to make sure that doesn't happen. The most visible group leading the effort to restore Olympia oysters is the Puget Sound Restoration Fund (PSRF). With help from Washington Sea Grant, PSRF recently published a 12-page booklet called *Reestablishing Olympia Oyster Populations in Puget Sound*. The booklet is a primer for tideland owners interested in raising their own garden of native Olympias to help ensure their recovery. Download the booklet from Sea Grant's publications page: [www.wsg.washington.edu/publications/recent/index.html](http://www.wsg.washington.edu/publications/recent/index.html).

## Giving your aquarium the heave-ho? Don't release fish or plants to the wild!

If you're getting rid of ornamental fish or plants, please don't release them into nearby ponds or streams. Non-native fish and plants may be wonderful in home aquariums, but they may cause serious problems when released or dumped in the wild.

Habitattitude®, a national initiative developed by the Aquatic Nuisance Species Task Force and others, offers several alternatives to getting rid of aquarium life. Go to: [www.habitattitude.net](http://www.habitattitude.net).



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### PUGET SOUND ACTION TEAM

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Puget Sound Action Team | Sound Waves Newsletter

Spring 2006

# EPA evaluators give high marks to Action Team

The U.S. Environmental Protection Agency gave high marks to the Puget Sound Action Team's efforts to coordinate conservation and restoration actions in Puget Sound after conducting a comprehensive review and site visit.

In 1988, Puget Sound was designated one of America's Estuaries of National Significance, among 28 such places around the country that make up the National Estuary Program (NEP). Since then, the Action Team has coordinated the Puget Sound NEP under the authority of the federal Clean Water Act (CWA). The long-term *Puget Sound Water Quality Management Plan* and the two-year *Puget Sound Conservation and Recovery Plan* are federally recognized as the official plans for the Puget Sound NEP.

"(You have) demonstrated your success in building partnerships to solve water quality problems, target emerging issues and (be) actively involved in technology transfer to local communities," wrote Suzanne Schwartz, director of the Oceans and

Coastal Protection Division of EPA, in the seven-page report.

The evaluation also commends the Action Team for "successfully bridging multiple jurisdictions and authorities to effectively plan and manage Puget Sound protection and restoration efforts."

On a related note, EPA's Pacific Northwest Regional Office recently designated Puget Sound as a Regional Geographic Priority, and agreed to lead an effort to improve alignment of federal agencies working on Puget Sound issues with the Puget Sound NEP's priorities.

Through the National Estuary Program, the Action Team received \$500,000 in CWA funding for 2006 to support the efforts to protect and restore Puget Sound. The Washington Department of Ecology manages additional NEP funding for Puget Sound.

The EPA evaluation of the Action Team was issued in late 2005 and is available for public review at [www.psat.wa.gov/nep](http://www.psat.wa.gov/nep).



**Ken Moody (center) of Environmental Earth Systems explains innovative technologies for a septic system on Hood Canal to Michael Rylko (left) of EPA's Region 10 office. Rylko was part of an EPA evaluation group that gave the Action Team high marks for its work on Puget Sound. / John McShane, EPA**